# **COMMITTEE ON SCIENCE OVERSIGHT AGENDA – 107<sup>th</sup> Congress**

Energy	Environment, Technology, and Standards	Research	Space & Aeronautics
Energy Policy and the Role of Energy R & D	Strength of Science at the Environmental Protection Agency	Science and Math Education	NASA Contract Management
DOE Laboratories	Standards and International Competitiveness	Federal R&D Funding Balance	FAA Research and Development
DOE Organizational Issues	Intellectual Property and its Impact on the R & D Enterprise	Academic/ Industry Partnerships	Agency Compliance with Congressional Directives
Contract Management	Biotech	Biotech (including Plant Genome)	NASA Research Grants
Future Science Facility Needs	Information Technology	Government-wide initiatives (e.g. nanotechnology)	Competitive Outsourcing at NASA
Energy Aspects of Climate Change	Climate Change	Information Technology	Aerospace Workforce
Results Act	Technology to Fight Crime	Astronomy	Results Act
Review of Existing Laws	Results Act	Oceans/ Marine Research	Review of Existing Laws
	Review of Existing Laws	Antarctic Research	
		U.S. Fire Administration Grants	
		Results Act	
		Review of Existing Laws	

## **Subcommittee on Energy**

Topic	Description	Notes
Energy Policy and the Role of	Soaring energy prices have once again placed energy on the front	
Energy R&D	burner of the Nation's and the new Administration's agenda.	
	President Bush has recently announced the creation of a high-	
	level energy task force headed by Vice-President Cheney, and the	
	Congress is expected to begin work on comprehensive energy	
	legislation in the 107 <sup>th</sup> Congress that will include energy R&D	
	programs under the jurisdiction of the Science Committee. Goal	
	is to help develop an energy policy by creating an effective,	
	balanced portfolio of energy research programs within the	
	Department of Energy, including fossil, nuclear, renewable and	
	efficiency programs.	
DOE Laboratories	DOE's laboratory complex—funded at about \$6 billion	
	annually—originated during World War II with the establishment	
	of the Manhattan Project to develop the atomic bomb and grew	
	during the Cold War. With the end of the Cold War, DOE's	
	laboratory complex is—in the opinion of most experts— in need	
	of more focused missions. Of particular interest in the 107 <sup>th</sup>	
	Congress will be the status of performance contracting, the	
	evolution of R&D collaborative efforts with universities and	
	industry, the management of the labs as a true system, the	
	transition to external regulation, and an aging DOE workforce.	
	Also at issue is the laboratory infrastructure, which in many cases	
	is aging and deteriorating.	
DOE Organizational Issues	DOE's organization includes a dozen headquarters program	Major Management Challenges
	offices, 10 major field offices with many smaller offices located	and Program Risks:
	near DOE's facilities, and over 50 major facilities owned by the	Department of Energy (GAO-
	government and operated by DOE's contractors. The General	01-246, January 2001), p. 11.
	Accounting Office (GAO) has found that: (1) DOE does not have	
	clear lines of authority linking the Department's units; (2) the	
	roles and responsibilities of DOE's headquarters and field offices	
	are not clearly defined; (3) contractors, such as those operating	
	the large National Laboratories, receive policy guidance from	
	many different program offices but are managed and evaluated by	
	field offices that are not accountable to the program offices; and	

		,
	(4) several program (and staff) offices can direct a single contractor, bypassing the field office and other program offices and limiting DOE's ability to hold contractors accountable for their activities and ultimately affects their performance. While DOE took some steps to resolve these issues, frustration with the status quo led Congress to create the National Nuclear Security Administration as a semiautonomous agency within DOE to manage the Department's stockpile stewardship, naval nuclear reactor, and nuclear nonproliferation programs, in 1999. However, in spite of these reorganizations, GAO has found that problems continue.	
Contract Management	Federal Government—obligating about \$15.5 billion, or about 91 percent, to contracts in fiscal year 1999. GAO first designated DOE's contract management as a high-risk area in 1990 and continues "to believe that contract management—contract	Major Management Challenges and Program Risks: Department of Energy (GAO- 01-246, January 2001), p. 18.
	administration and project management—is at high risk for fraud, waste, abuse, and mismanagement." GAO has found that DOE has begun a number of initiatives in contract management and has made progress in this area, but that it is too soon to tell whether the initiatives will be effective in the long run.	
Future Science Facility Needs	There are a number of science facility upgrades being planned/proposed for several existing neutron/synchroton sources and for next-generation high energy and nuclear physics and fusion facilities, which would be reviewed.	
Energy Aspects Of Climate Change	The Subcommittee in conjunction with the Environment, Technology, and Standards Subcommittee intends to conduct oversight hearings on climate change (e.g. energy aspects).	
Results Act	Use Government Performance and Results Act principles to analyze and review DOE programs, performance plans, and budgets.	
Review of Existing Energy Laws	From the period 1974-1990, the Science Committee passed over 20 pieces of energy legislation, which have never been systematically reviewed using Results Act principles to assess what is obsolete, outdated, how much was spent and what was accomplished. This review will determine the need for updates.	

## Subcommittee on Environment, Technology, and Standards

Topic	Description	Notes
Strength of Science at the	The Subcommittee intends to conduct oversight hearings on the	
Environmental Protection Agency	profile of science in the agency, the rigor of peer review	
	mechanisms, aging of the workforce at EPA labs, ability of the	
	agency to recruit top-quality scientists, the agency's commitment	
	to essential environmental monitoring, the data quality in agency	
	databases.	
Standards and International	The Subcommittee intends to conduct oversight hearings on the	
Competitiveness	divergence between the standard-setting in the US and that of our	
	competitors, the US role in helping shape international standards,	
	and the implications for US industries in the global marketplace.	
Intellectual Property and its Impact	The Subcommittee in conjunction with the Research	
on the Research and Development	Subcommittee intends to conduct oversight hearings on	
Enterprise	intellectual property laws and the balance between the need for	
	adequate returns on R&D and the demands from society for	
	affordable products. The Subcommittee also intends to	
	investigate issues regarding ownership of scientific knowledge,	
	especially when that knowledge is derived from publicly	
	available or funded sources, to examine the balance between the	
	need for adequate returns on research and the ability of other	
	researchers to make further progress.	
Biotech	Examine the federal government's biotechnology policy and	
	evaluate its effectiveness.	
Information Technology	The Subcommittee intends to conduct oversight hearings on	
	privacy and security on the Internet, the impact on the research	
	enterprise of allowing databases to be copyrighted, and barriers to	
	the development of new information technologies.	
Climate Change	The Subcommittee in conjunction with the Energy Subcommittee	
	intends to conduct oversight hearings on the science of climate	
	change.	
Technology to Fight Crime	New technologies are helping to fight crime. In particular,	
	advances have improved the speed and accuracy of information	
	processing. Improvement in processing information allows law	
	enforcement to spend valuable time on the street rather than	
	behind a desk, and enhances response time to distress calls.	

	Oversight in this area is necessary to identify emerging issues and	
	focus on areas where the federal government could help develop	
	better crime prevention and fighting technology.	
Results Act	Ensure that federal activities under this Subcommittee's	
	jurisdiction are developed and undertaken in a manner consistent	
	with the Government Performance and Results Act and with	
	established national science priorities.	
Review of Existing Law	Review all current laws to assess the need for update and/or	
-	modification.	

### **Subcommittee on Research**

Topic	Description	Notes
Science and Math Education	<ul> <li>Continue to oversee NSF programs aimed at improving math and science education at the K-12, undergraduate, graduate, and post-doctoral levels.</li> <li>Review research programs designed to improve our understanding of how children learn and examine mechanisms for dissemination of the results of such programs.</li> </ul>	
Federal R & D Funding Balance	Examine the balance of funding among fields within the federal research portfolio.	
Academic/ Industry Partnerships	Review the effectiveness of Academic/ Industry partnerships.	
Biotech (e.g. Plant Genome)	Review current status of biotech initiatives particularly that of the plant genome initiative at NSF and the transition to functional genomics studies.	
Government-wide Research Initiatives (e.g. nanotechnology, information technology R&D)	Review federal research and development programs and their impact on nanotechnology and information technology.	
Information Technology	Review federal research and development programs and their impact on information technology.	
Astronomy	Examine funding for NSF astronomy programs to ensure an appropriate balance between spending on new facilities, operation and maintenance for existing facilities, and investigator-initiated research.	
Oceans/ Marine Research	Examine issues related to the academic fleet, Coast Guard icebreaker, Ocean Drill Program, and ocean monitoring.	
Antarctic Research	Review NSF modernization effort at South pole to ensure project is proceeding according to schedule and budget.	
U.S. Fire Administration Grants	Oversee implementation of new, USFA-administered firefighter grant program.	
Results Act	Review implementation of Government Performance and Results Act at NSF, USFA, and NEHRP agencies.	
Review of Existing Laws	Review all current laws to assess the need for update and/or modification.	

## **Subcommittee on Space and Aeronautics**

Topic	Description	Notes
NASA Contract Management	Review NASA's contracting procedures to ensure their overall	
	consistency with existing federal guidelines promoting	
	competition and outsourcing.	
FAA Research and Development	Ensure that FAA R&D programs will lead to improvements in	
	FAA mission performance.	
Agency Compliance with	Review agency compliance with legal direction provided to it by	
Congressional Directives	Congress.	
NASA Research Grants	Review of NASA's research grant awards process to ensure it is	
	competitive and open to the widest segment of the scientific	
	community.	
Competitive Outsourcing at NASA	Review NASA's contracting procedures to ensure their overall	
	consistency with existing federal guidelines promoting	
	competition and outsourcing.	
Aerospace Workforce	Review status of aerospace industry workforce and federal	
	programs intended to ensure that the workforce remains capable	
	of achieving national goals.	
Results Act	Ensure that federal space activities are developed and undertaken	
	in a manner consistent with the Government Performance and	
	Results Act and with established national science priorities.	
Review of Existing Legislation	Review all current legislation to assess the need for update and/or	
	modification.	